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FILE 'HOME' ENTERED AT 16:37:25 ON 19 AUG 2002 => file medline caplus biosis COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 0.21 0.21 FILE 'MEDLINE' ENTERED AT 16:37:49 ON 19 AUG 2002 FILE 'CAPLUS' ENTERED AT 16:37:49 ON 19 AUG 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS) FILE 'BIOSIS' ENTERED AT 16:37:49 ON 19 AUG 2002 COPYRIGHT (C) 2002 BIOLOGICAL ABSTRACTS INC. (R) => s (hybrid# or complex##) (10a) immobiliz## 5034 (HYBRID# OR COMPLEX##) (10A) IMMOBILIZ## => s (hybrid# or complex##) (10a) immobiliz## (10a) fluorescence 35 (HYBRID# OR COMPLEX##) (10A) IMMOBILIZ## (10A) FLUORESCENCE => s 12 and nucleic acid and RNA 2 FILES SEARCHED... 1 L2 AND NUCLEIC ACID AND RNA L3 => => => => => => S S L47425101 S => => => => s l3 and solid 1 L3 AND SOLID => s 15 and (pyrylium or ethidium or yoyo1) 1 L5 AND (PYRYLIUM OR ETHIDIUM OR YOYO1) => s 16 and dry? 0 L6 AND DRY?

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS

=> d 16 bib ab kwic

AN '1988:403447 CAPLUS

DN 109:3447

Analytical method and kit for detecting and measuring specifically sequenced nucleic acid using fluorescent intercalation compounds and waveguides as solid support

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PA Battelle Memorial Institute, Switz.

SO Eur. Pat. Appl., 50 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

FAN.CNI I														
	PATENT NO.					ND	DATE			API	PLICATION	NO.	DATE	
		- -												
PI	ΕP	245206			A1		19871111			EP	1987-810274		19870430	
		R:	BE,	CH,	DE,	ES,	FR,	GB,	IT,	LI, N	NL, SE			
	WO	8706956			A1	1	1987	1119		WO	1987-EP2	34	198705	02
		W:	AU,	BR,	DK,	FI,	JP,	NO,	US					
	ΑU	8775	838		A	L	1987	1201		AU	1987-758	38	198705	02
	JΡ	0150	0221		T2	2	1989	0126		JР	1987-503	871	198705	02
	FI	8705	770		Α		1987	1230		FI	1987-577	0	198712	30
	NO	8800	010		Α		1988	0210		NO	1988-10		198801	04
	DK	8800	006		Α		1988	0217		DK	1988-6		198801	04
PRAI	ΕP	EP 1986-810201					1986	0505						
	WO	1987	-EP23	34			1987	0502						

- A waveguide coated with single-stranded probe nucleic acids and carrying AB an internally reflected wave signal is contacted with an analyte soln. contg. denatured test DNA or RNA and fluorescent marker dye. Analyte nucleic acid with sequences homologous to that of the probe polynucleotide will hybridize therewith with concomitant binding of the fluorescent dye to the resultant duplex structures. Fluorescence resulting from the interaction of the wave signal at the waveguide/analyte interface with the signal generating centers created within the space probed by the evanescent component of the wave signal is detected and provides useful information on said sequences homologous to that of the probe nucleic acids. A plate waveguide with poly(dA) affixed (prepn. described for oligo dC on aminopropyl glass plate) was affixed into a flow cell and a base-line signal was obtained with buffer in the cell. Both ethidium bromide and poly-det were mixed and injected into the flow cell and the reaction was monitored. In a control, only ethidium bromide was added. The monitoring reaction was effectively immediate and only specific intercalation between double-stranded DNA was detected.
- TI Analytical method and kit for detecting and measuring specifically sequenced nucleic acid using fluorescent intercalation compounds and waveguides as solid support
- AB A waveguide coated with single-stranded probe nucleic acids and carrying an internally reflected wave signal is contacted with an analyte soln. contq. denatured test DNA or RNA and fluorescent marker dye. Analyte nucleic acid with sequences homologous to that of the probe polynucleotide will hybridize therewith with concomitant binding of the fluorescent dye to the resultant duplex structures. Fluorescence resulting from the interaction of the wave signal at the waveguide/analyte interface with the signal generating centers created within the space probed by the evanescent component of the wave signal is detected and provides useful information on said sequences homologous to that of the probe nucleic acids. A plate waveguide with poly(dA) affixed (prepn. described for oligo dC on aminopropyl glass plate) was affixed into a flow cell and a base-line signal was obtained with buffer in the cell. Both ethidium bromide and poly-det were mixed and injected into the flow cell and the reaction was monitored. In a control, only ethidium bromide was added. The monitoring reaction was effectively immediate and only specific intercalation between double-stranded DNA was detected.

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'nucleic acid probe immobilization waveguide;
ST
     fluorescence intercalator DNA detection waveguide
IT
     Antigens
     Avidins
     Carbohydrates and Sugars, uses and miscellaneous
     Glycosides
     Haptens
     Proteins, uses and miscellaneous
     RL: ANST (Analytical study)
         (in nucleic acid probe immobilization on waveguide,
        nucleic acid fluorescent detn. in relation to)
     Wavequides
IT
        (nucleic acid probe immobilization on, in
        nucleic acid detn., fluorescent intercalators in
        relation to)
     Nucleic acid hybridization
IT
        (to waveguide-immobilized nucleic acid probe and
        intercalation of fluorescent dye, in nucleic acid
        detn.)
     Cuvettes
IT
         (waveguides, nucleic acid probe immobilization on,
        in nucleic acid detn., fluorescent intercalators in
        relation to)
IT
     Glass, oxide
     RL: ANST (Analytical study)
         (beads, methylglucoside reaction products, for nucleic
        acid modification for immobilization on grafted waveguide)
IT
     Dyes
         (fluorescent, intercalation of, in target nucleic
        acid-waveguide-immobilized nucleic acid
        probe hybrids)
IT
     Spectrochemical analysis
        (fluorometric, of nucleic acids, by waveguide-immobilized
        nucleic acid probes and fluorescent intercalators)
TΤ
     Virus, bacterial
         (lambda, waveguide-immobilized probe DNA of, and ethidium
        bromide, in nucleic acid detn.)
IT
     Nucleotides, polymers
     RL: ANST (Analytical study)
        (oligo-, waveguide-immobilized probe, and fluorescent intercalators, in
        nucleic acid detn.)
     Wavequides
IT
        (optical, fiber, nucleic acid probe immobilization
        on, in nucleic acid detn., fluorescent
        intercalators in relation to)
     25086-81-1
TT
     RL: ANT (Analyte); ANST (Analytical study)
         (detn. of, by waveguide-immobilized poly-dA and ethidium
        bromide, fluorescent)
IT
     919-30-2, 3-Aminopropyltriethoxysilane 7803-62-5D, Silane, trialkoxy
     derivs.
     RL: ANST (Analytical study)
         (grafting of, on waveguide, for nucleic acid
        attachment, nucleic acid detn. in relation to)
IT
     7601-90-3D, Perchloric acid, salts 7681-82-5, Sodium iodide, uses and
     miscellaneous 9012-90-2, DNA polymerase 9042-14-2D, Dextran sulfate,
                9068-38-6, Reverse transcriptase
     polymers
                                                    25322-68-3
     RL: ANST (Analytical study)
        (in nucleic acid detn. using waveguide-immobilized
        nucleic acid probes and fluorescent intercalators)
IΤ
     58-85-5, Biotin
     RL: ANST (Analytical study)
        (in nucleic acid probe immobilization on waveguide,
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nucleic acid fluorescent detn. in relation to)

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. IT 1239-45-8, Ethidium bromide
       RL: PROC (Process)
          (in target nucleic acid-waveguide-
          immobilized nucleic acid probe
          hybrids, fluorescence anal. of)
       25191-20-2D, Poly-dA, grafted waveguide reaction products
  IT
       RL: ANST (Analytical study)
          (poly-dT fluorescent detn. with ethidium bromide and)
  TТ
       97-30-3DP, reaction products with controlled pore glass
       RL: SPN (Synthetic preparation); PREP (Preparation)
          (prepn. of, for nucleic acid modification for
          immobilization on grafted waveguide)
       25104-18-1DP, reaction products with isothiocyanante-silane graft polymer
  IT
       38000-06-5DP, reaction products with isothiocyanante-silane graft polymer
       114866-16-9DP, reaction products with polylysine
                                                         114866-16-9P
       RL: SPN (Synthetic preparation); PREP (Preparation)
          (prepn. of, in prepn. of waveguide-immobilized nucleic
          acid probe for nucleic acid detn.)
  IT
       4044-65-9, 1,4-Phenylenediisothiocyanate 25104-18-1, Polylysine
       38000-06-5, Polylysine
       RL: RCT (Reactant)
          (reaction of, in prepn. of waveguide-immobilized nucleic
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acid probe for nucleic acid detn.)

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